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IT for a Sustainable and Secure World



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Farradyne

Traveler Information Data Accuracy and Coverage Needs

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California 511 Workshop: The 511 Your Customers Want

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Outline

- § User Needs
- § Past work on data needs
- § Considerations
 - § Flexibility
 - § Accuracy
 - § Multimodal
 - § Normal conditions vs incidents or events



Match Data to User Needs

- § Talk to users
 - § Define your users – be as inclusive as you can!
- § Vision for the 511 system
- § ConOps
- § Requirements



ITS America Survey of ISPs, 1999

- § Data collection priorities
 - § Traffic speeds
 - § Incidents
 - § Road conditions
 - § Current and scheduled work zones
 - § Weather conditions



National 511 Coalition

Basic Content Guidelines – Highways

Content:

- § Construction/maintenance projects
- § Road closures and major delays
 - § Includes major incidents/accidents and congestion
- § Major special events
- § Forecasted weather and road surface conditions

- § In urban areas, add:
 - § All incidents, accidents and congestion information

- § Strong encouragement to deploy if possible
 - § Segment travel times
 - § Observed weather and road surface conditions



National 511 Coalition: Data Fusion System

- § Fusion engine must be in place to receive incoming data (automated or manually generated)
- § Fusion engine must be capable of creating structured data (parse-able database) for delivery to dissemination platforms.



Flexibility

- § Ability to add or change coverage
 - § Needs will change
 - § Conditions will change
 - § Technology will change
 - § Need to be able to respond to or take advantages of changes



Accuracy

- § User perspective on information accuracy is most important
- § Relative accuracy may be more important than absolute accuracy



Multimodal

- § Transit
 - § Departure information
 - § Location information
 - § Schedule adherence
- § Traffic
 - § Speed, congestion, travel times
 - § Incidents
 - § Closures / work zones



Normal conditions vs incidents or events

- § Are data needs different?
- § What information do users want in these conditions?
 - § Closure information
 - § Detour information
 - § Traffic conditions on detour routes
 - § Information from emergency managers
- § Data in emergencies
 - § Portable devices to cover detours
 - § More input from Maintenance, Police, and Emergency Services



Bay Area Example: Information Tailored to Event

- § Data Tailored to Event + User Needs
 - § Static maps with detour information
 - § Detour driving times
 - § New “ticker” to share information on all sister sites
 - § Re-structured, flexible menu
 - § Floodgates at more menu locations
 - § Improved floodgate tool
 - § Out of Service Links
 - § Automatically provides new trips when a critical link is out of service
 - § Portable data collection devices



Other Considerations

- § Geographic Coverage
 - § What areas and facilities will be covered?
 - § Freeways?
 - § Arterials?
 - § Rail?
 - § Buses?
- § Accessibility and Data Ownership
 - § What can you use third party data for?

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Thank you!